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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,992	12/29/2003	Steven Maurice Sikorski	SBL01595	8250

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EXAMINER	
LAY, MICHELLE K	

ART UNIT	PAPER NUMBER
2628	

NOTIFICATION DATE	DELIVERY MODE
08/11/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docketing.US@motorola.com

Office Action Summary	Application No.	Applicant(s)	
	10/748,992	SIKORSKI, STEVEN MAURICE	
	Examiner	Art Unit	
	MICHELLE K. LAY	2628	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *18-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *18-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The amendment filed 07/27/2009 after a decision by the Board of Patent Appeals and Interferences has been entered and made of record. Claims 18-37 are pending.

Response to Arguments

Applicant's arguments filed 07/27/2009 have been fully considered but they are not persuasive. Applicant argues Browning (6,707,581 B1) in view of Cheatle (7,305,146 B2) and Manchester (2004/0201595 A1) fails to teach the capture corresponds to inversion or rotation of a display. Examiner respectfully disagrees. Cheatle discloses an image processing system and image capture system. An image (40) is captured using an optical lens system (42) that focuses the optical image onto an image array (44). A tilt sensor (46) is also included in the camera system to provide indication of the angle at which the camera is held and provides a signal indicative of the rotation of the camera to an angle input (48) of the image processor (52). The image processor (52) is arranged to correct the tilt of the original image. The corrected output may either be stored on an image recording means (54), such as a hard disk, ram card or other storage means, or ay alternatively or additionally be displayed on a display means (56). The display means may be the view finder of the camera system or a display screen of an image viewing system [c.6 L.37-56]. Thus, Cheatle teaches that the camera can have a view finder (i.e., ***display***). Therefore, if there is a tilt in the camera, there will also be a tilt of the display.

Claim Rejections - 35 USC § 103

1. Claims **18-21, 23, 24, 29-37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Browning (6,707,581 B1) in view of Cheatle (7,305,146 B2) and Manchester (2004/0201595 A1).

Browning teaches the limitations of claims 18-21, 23, 24, 29-37 with the exception of disclosing an orientation component that orients the images on the display in view of the user regardless of the position of the device. However, Manchester teaches a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics. Additionally, Cheatle teaches a camera comprising a tilt sensor to correct the output orientation.

In regards to claim **18**, the invention of Browning comprises a handheld scanner and information retrieval software. The software can retrieve information from a remote source or can be entirely incorporated within the handheld scanner (said ***mobile device***) [col. 2, lines 38-49]. As shown in Fig. 1, the scanner is incorporated within a personal digital assistant (PDA) (10). The scan is performed by sweeping the scan head (16) (said ***image capture component***) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label [col. 2 lines 50-57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects (said ***display***). Referring to Fig. 3, the scan head (16), decoder, and other integrated circuits are controlled by means of a microprocessor that is programmed with instructions to carry out the method of

Browning (said ***analysis component***) [col. 3 lines 48-51]. The electrical signals generated by the CCD in the scan head (16) are stored in a RAM (18) as a complete image [col. 3 lines 7-9] for subsequent presentation to a companion information-retrieval agent [col. 3 lines 31-33]. The handheld scanner can work in conjunction with a separate communications device to provide access to a remote source and retrieve information that is identified by the scan image [col. 4 lines 3-7]. Information can also be directly stored in the handheld scanner, in which case remote communications capabilities are not required [col. 4 lines 21-23]. In a playback mode, the retrieved information is displayed to the user immediately upon receipt (said ***determines product identity***) [col. 5 lines 31-32]. This information would contain product information and location associated with the barcode (i.e. image) obtained by the information-retrieval agent either from a remote source, such as a personal computer or within the handheld scanner itself. In a storage mode, the retrieved information is stored for later viewing by the user at a time that may be more convenient [col. 5 lines 33-34].

Cheatle discloses an image processing system and image capture system. An image (40) is captured using an optical lens system (42) that focuses the optical image onto an image array (44) (said ***image capture component***). A tilt sensor (46) is also included in the camera system to provide indication of the angle at which the camera is held and provides a signal indicative of the rotation of the camera to an angle input (48) of the image processor (52). The image processor (52) is arranged to correct the tilt of the original image (said ***capture corresponds to rotation***). The corrected output may either be stored on an image recording means (54), such as a hard disk, ram card or

other storage means, or ay alternatively or additionally be displayed on a display means (56). The display means may be the view finder of the camera system or a display screen of an image viewing system (said ***capture corresponds to rotation of a display***) [c.6 L.37-56]. Thus, Cheatle teaches that the camera can have a view finder (i.e., ***display***). Therefore, if there is a tilt in the camera, there will also be a tilt of the display.

Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. Fig. 1 is an illustration of a self-orienting display (100) comprising a display device (12), a display image (14), a sensor (16), and optional control buttons (18). The self-orienting display (12) may be in the form of any appropriate display device capable of providing the display image (14), such as hand held devices (said ***a mobile device***) [0020]. The sensor (16) may include a single sensor or a plurality of sensors [0020]. The sensors (16) can be positioned on the viewer (36) of Fig. 8 and/or on the display device (12) to sense the orientation of the viewer and/or display device [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (said ***rotates information to an optimal viewing orientation***) [0025]. The display image (14) may be in the form of a graphic display image, a textual display image, a video display image, and a functional control button

(18), or a combination thereof. The display image (14) may comprise display image portions, such as display image portions (14a) and (14b). As depicted in Fig. 1, a graphic/video display type is provided by the display image portion (14a) and a text display type is provided by the display image portion (14b) [0022]. Manchester includes an authentication component by analyzing the sensed image, which is sensed by the camera (16b) [0036]. The sensed image maybe analyzed for key features [0036].

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to orient the display of Browning with the invention of Cheatle and Manchester because capture devices can be held at an angle due to reasons such as capturing an image in a hurry or the user being inexperienced, or inexperienced with the particular capturing device. Additionally, the capture device may not have a view finder allowing the user to check the orientation of the image [Cheatle: c.4 L.49-60]. Furthermore, the display image becomes difficult to read/see when the display device is turned or rotated [Manchester 0003]. Therefore, it would have been obvious to one of ordinary skill in the art to rotate the tilted image so that the image is correctly oriented to the user allowing it to be easier to read.

In regards to claim **19**, Browning teaches the scan is performed by sweeping the scan head (16) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label [col. 2 lines 50-57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects (said ***display***). Thus, the signals (said ***optical signals***) from the scan head are

sent to the display to display an image of the product associated with barcode product identifier on a label that was scanned.

In regards to claim **20**, Browning teaches the scan is performed by sweeping the scan head (16) of the handheld scanner (10) across printed media containing information of interest, such as a barcode product identifier on a label [col. 2 lines 50-57]. The handheld scanner (10) provides a LED/LCD display (22) for displaying the graphical objects (said ***display***). Thus, the signals (said ***optical signals***) from the scan head are sent to the display to display an image of the product associated with barcode product identifier on a label that was scanned. Additionally, Manchester teaches the display image (14) may be in the form of a graphic display image, a textual display image, a video display image, and a functional control button (18), or a combination thereof. The display image (14) may comprise display image portions, such as display image portions (14a) and (14b). As depicted in Fig. 1, a graphic/video display type is provided by the display image portion (14a) and a text display type is provided by the display image portion (14b) [0022]. The same rationale for combining as applied to claim 18 is incorporated herein.

In regards to claim **21**, Manchester teaches the display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable

regardless of the orientation of the display device (12) (said ***rotating information***) [0025]. The same rationale for combining as applied to claim 18 is incorporated herein.

In regards to claim **23**, Browning teaches the scanner can include a speaker (27) which provides audible feedback to the user [col. 3 lines 41-47]. The claim language recites comprising a keypad, a touch screen or an audio/voice recognition component that provides feedback or input to the system, which limits the claim to needing only one of the limitations listed. Thus, the speaker providing audible feedback teaches such limitations

In regards to claim **24**, Browning teaches the scanner can include a speaker (27) which provides audible feedback to the user [col. 3 lines 41-47].

In regards to claim **29**, claim 29 recites the same limitations as claim 18. Therefore, the same rationale used for claim 18 is applied. Furthermore, Browning teaches the handheld scanner can work in conjunction with a separate communications device to provide access to a remote source and retrieve information that is identified by the scan image (said ***data retrieval***) [col. 4 lines 3-7]. Information can also be directly stored in the handheld scanner, in which case remote communications capabilities are not required [col. 4 lines 21-23].

In regards to claim **30**, claim 30 recites the same limitations as claim 19. Therefore, the same rationale used for claim **19** is applied.

In regards to claim **31**, Browning teaches by scanning a bar-coded label on a product, the system enables the user to connect to a web site hosted by the manufacturer of that product, to obtain additional information about the product or other products by that manufacturer. Furthermore, the internal database could directly provide the user with a limited amount of information about the product, e.g., suggested retail price. If the user desires additional information, a connection to the web site associate with that product can be initiated. The scanner can be used to input information about a product to a buying service or the like. For instance, when a product's bar-coded label is scanned, information about that product can be transmitted to the buying service, along with the indication of the user's desire to purchase that product [col. 7 lines 18-43]. Additionally, to facilitate later cataloguing and retrieval of scanned information, the scanner can include a clock which the microprocessor employs to stamp each stored entry with an associated data and time, which information is also presented to the information-retrieval agent, where the retrieval agent allows the user to view the scanned information and group by relevance, date and time, priority or topic [col. 3 lines 50-60]. Although Browning does not specifically disclose market share values of the scanned product, it would have been obvious to one of ordinary skill in the art that with the capability of the connection to the web site, such information can easily be obtained.

In regards to claim **32**, information can also be directly stored in the handheld scanner of Browning [col. 4 lines 21-23]. Additionally, in a storage mode, the retrieved information is stored for later viewing by the user at a time that may be more convenient [col. 5 lines 33-34].

In regards to claim **33**, the electrical signals generated by the CCD in the scan head (16) are stored in a RAM (18) as a complete image [col. 3 lines 7-9] for subsequent presentation to a companion information-retrieval agent [col. 3 lines 31-33]. The handheld scanner can work in conjunction with a separate communications device to provide access to a remote source and retrieve information that is identified by the scan image [col. 4 lines 3-7]. Information can also be directly stored in the handheld scanner, in which case remote communications capabilities are not required [col. 4 lines 21-23]. In a playback mode, the retrieved information is displayed to the user immediately upon receipt [col. 5 lines 31-32]. This information would contain product information and location associated with the barcode (i.e. image) obtained by the information-retrieval agent either from a remote source, such as a personal computer or within the handheld scanner itself. In a storage mode, the retrieved information is stored for later viewing by the user at a time that may be more convenient [col. 5 lines 33-34].

In regards to claims **34** and **35**, Manchester discloses a self-orienting display that senses the characteristics of an object and automatically rotates and reformats a display image in accordance with those characteristics [0019]. With reference to Fig. 8,

the sensors (16) (said ***sensor component***) can be positioned on the viewer (36) and/or on the display device (12) to sense the orientation of the viewer and/or display device (said ***according to user state***) [0027]. The display image (14) is oriented with respect to the orientation of the display (12). As the display device (12) oriented as shown in Fig. 1 is rotated, the display image (14) is automatically oriented, such that the appearance of the display image (14) appears to remain approximately stable regardless of the orientation of the display device (12) (said ***customizing viewing position***) [0025]. The same rationale for combining as applied to claim 18 is incorporated herein.

In regards to claim **36**, with reference to Fig. 8 of Manchester, the sensors (16) can be positioned on the viewer (36) and/or on the display device (12) to sense the orientation of the viewer (said ***sightline***) [0027]. The display is then oriented based on the sensed information (said ***optimized viewing position***).

In regards to claim **37**, claim 37 recites the same limitations as claim 29. Therefore, the same rationale used for claim 29 is applied.

2. Claims **22** and **25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Browning (6,707,581 B1) in view of Cheatle (7,305,146 B2) and Manchester (2004/0201595 A1) as applied to claim 18 above, and further in view of Hoon et al. (2002/0186878 A1).

Browning in view of Cheatle and Manchester teaches the limitations of claim 22 with the exception of a analyzing the image of a product to determine if the product is damaged.

Hoon teaches a method/system for analyzing multiple images to locate defects (claim **22**).

Fig. 5 illustrates method (500) of Hoon. Once the image data is obtained (502), each set of data is analyzed (504). At step (506), it is determined whether all images are within an acceptable predetermined range (claim **25**) [0038-0046].

It would have been obvious to one of ordinary skill to include the analyzing method of Hoon in order to determine if the product of scanned by the method/system of Browning is damaged. This would provide further detail of the product in order to assist the party responsible of the product to make further decisions as to how to handle the item.

3. Claim **26-28** is rejected under 35 U.S.C. 103(a) as being unpatentable over Browning (6,707,581 B1) in view of Cheatle (7,305,146 B2) and Manchester (2004/0201595 A1) as applied to claim 18, and further in view of Melaku et al. (2003-0144793 A1) and Cardno (2004/0036712 A1).

Browning in view of Manchester teaches the limitations of claims 26-28 with the exception of disclosing determining if a product is placed for effective shopping. However, Melaku and Cardno provide a graphical interface that monitors the traffic flow of stores.

The location server database of Melaku is loaded with a full knowledge of the floor plan. The local server retrieves item information from the local database maps that (X,Y) location to a meaningful indication such as a shelf number in the store [0040]. With reference to Figs. 10, 12, and 14, the display of Melaku presents the user with a graphical representation of many aisles and shelves and the location of items [0058-0062].

It would have been obvious to one of ordinary skill in the art to provide a graphical layout of the product location in order to locate the desired item easily and minimize the time needed to locate the desired item.

With reference to Fig. 3 of Cardno, a display is arranged to display a contoured representation of customer interest points within retail premises [0036]. Further, by viewing representations produced over a time period, a user would be able to recognize trends, or crowds [0066]. Thus, if there is poor traffic flow near around a particular item in a store, the data shows that the item is not correctly placed, and from the data, can place the item where there is less traffic flow.

Therefore, it would have been obvious to one of ordinary skill in the art to implement the traffic monitoring of Cardno with the invention of Browning in order to recognize trends, or crowds [Cardno: 0066], for proper product placement.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michelle K. Lay whose telephone number is (571) 272-7661. The examiner can normally be reached on Monday-Friday 7:30a-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kee M. Tung can be reached on (571) 272-7794. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michelle K. Lay/
Examiner, Art Unit 2628
August 5, 2009

/Kee M Tung/
Supervisory Patent Examiner, Art Unit 2628